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IN THE CLAIMS:

Please amend the claims as shown in the following claim listing.

CLAIM LISTING:

1. (Original) An apparatus for forming a non-woven fabric product having substantially perpendicular warp yarns and weft yarns, said apparatus comprising in combination,
 - a warp yarn support system including an elongated substantially cylindrical support structure having a low friction outer substantially cylindrical surface,
 - a supply of elongated parallel warp yarns positioned side-by-side along the length of said substantially cylindrical surface, said warp yarns having a coating of adhesive on their exposed surface,
 - a delivery system for weft yarn material including a drum mounted for rotation about said support structure, power means for rotating said drum about said support structure, at least one source supply of weft yarn material mounted on said drum for rotation therewith, and a guide system for delivering said weft yarn material from said source supply to said adhesive coated outer surface of said warp yarns, upon rotation of said drum such that said weft yarn material is wrapped around said warp yarns in substantially perpendicular relationship therewith,
 - a driven take-up system downstream from said weft yarn delivery system operatively connected to said warp yarns for moving said warp yarns along said support structure and through said weft yarn delivery system, and
 - a heater downstream from said weft yarn delivery system for activating said adhesive to bond said wrapped weft yarn material to said warp yarns,
- wherein said driven system and said power means for rotating said drum are independently operated and at least one is variably driven such that the angle of wrap of

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said weft yarn material relative to the warp yarns is variable.

2. (Original) The apparatus of claim 1, wherein said source supplies of weft yarn material are spools of the weft yarn material.

3. (Original) The apparatus of claim 1, wherein said drum comprises a hollow ring surrounding said cylindrical support structure having a radial wall with inner and outer surfaces and a spaced apart radial wheel interconnected with said radial wall and said source supplies of weft yarn material are mounted on the inner surface of said radial wall.

4. (Original) The apparatus of claim 3, wherein weft yarn material from each of said source supply is fed to said radial wheel radially inwardly along said radial wheel to the warp yarns on said cylindrical support structure.

5. (Cancelled). Note – no text for claim number 5 was originally presented.

6. (Cancelled). Note – no text for claim number 6 was originally presented.

7. (Currently Amended) The apparatus of claim 1 6, wherein said radial wheel further includes a conical alignment guide positioned immediately adjacent to said warp yarns and around which said weft yarns extend prior to being wound around said warp yarns.

8. (Original) The apparatus of claim 1, wherein said weft yarn material is wrapped about said warp yarns so as to establish 40-100 wraps of weft yarn material per inch along the length of said warp yarns.

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9. (Withdrawn) A non-woven fabric comprised of one layer of warp yarns and a second layer of substantially perpendicular weft yarns, the density of at least one of said warp yarns and weft yarns in the fabric being in the range of 40-140 yarns per inch.

10. (Withdrawn) The fabric of claim 9, wherein the density of both said warp yarns and weft yarns in the fabric is in the range of 40-140 yarns per inch.

11. (Withdrawn) The fabric of claim 9 or 10, wherein the denier of said warp and weft yarns is different.

12. (Withdrawn) The fabric of claim 9 or 10, wherein the denier of said warp and weft yarns is the same.

13. (Withdrawn) A non-woven sail cloth fabric comprised of a layer of warp yarns and a layer of substantially perpendicular weft yarns adhesively secured together, said adhesive constituting 5-20% of the weight of the non-woven fabric.

14. (Withdrawn) The sail cloth fabric of claim 13, wherein the density of at least one of said warp yarns and said weft yarns in the fabric is in the range of 40-100 yarns per inch.

15. (Withdrawn) The sail cloth fabric of claim 14, wherein the density of both said warp yarns and weft yarns in the fabric is in the range of 40-100 yarns per inch.

16. (Withdrawn) The sail cloth fabric of claims 13, 14, or 15, wherein the denier of said warp and weft yarns is different.

17. (Withdrawn) A method of forming a non-woven product having warp

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yarn material in a first direction and weft yarn material in a substantially perpendicular direction to said warp yarns, said method including the steps of:

supplying a plurality of substantially parallel warp yarns longitudinally of their length in said first direction, said warp yarns having a coating of adhesive on one side thereof;

supporting said plurality of warp yarns, with said adhesive coating exposed, in longitudinally moving relationship and in a side-by-side arrangement along the length of an elongated substantially cylindrical support surface;

wrapping at least one individual weft yarn to and around the radially outermost surface of the warp yarns in a substantially perpendicular relationship therewith; moving the warp yarns along the support surface for downstream collection subsequent to the wrapping step;

heating and thereby activating the adhesive to bond the wrapped weft yarns to the warp yarns.

18. (Withdrawn) The method of claim 17, wherein the weft yarns are wrapped about the warp yarns so as to establish 40 to 100 wraps per inch of weft yarns along the length of the warp yarns.

Please add the following new claims, which are clearly part of the Group I election – see Claims 1 and 7.

19. (New) An apparatus for forming a non-woven fabric product having substantially perpendicular warp yarns and weft yarns, said apparatus comprising in combination:

a warp yarn support system including an elongated substantially cylindrical support structure extending along the length of said warp yarns and having a low-friction, substantially cylindrical outer surface;

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an endless belt extending along the length of said warp yarns and movable along the length of said support structure;

a supply of elongated parallel warp yarns that are positioned side-by-side upon said endless movable belt along the length of said support structure and that have a coating of adhesive at least on their exposed surfaces, preferably only on their exposed surfaces;

a delivery system for weft yarn including: a drum mounted for rotation about said support structure, about said endless belt and about said warp yarns, power means for rotating said drum about said support structure endless belt and warp yarns, at least one source of supply of said weft yarn mounted on said drum for rotation therewith, and a guide system for delivering said weft yarn from said source of supply of said weft yarn to said adhesive coated outer surface of said warp yarns upon rotation of said drum, such that said weft yarn is wrapped about said warp yarns in substantially perpendicular relationship therewith;

a driven system that is operatively connected to said endless belt for moving said warp yarns along the length of said support structure and through said weft yarn delivery system;

a heater for activating said adhesive to bond yarns, between which is said adhesive; and

a conical alignment guide which is positioned immediately adjacent, preferably downstream, of said drum and immediately adjacent to, and about, said warp yarns, and about which said weft yarn is wound prior to falling down upon, and being wound about, said warp yarns and said coating of adhesive on said exposed surfaces of said warp yarns.

20. (New) The apparatus of claim 19 wherein the parallel warp yarns have a coating of adhesive only on their exposed surfaces.

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21. (New) The apparatus of claim 19 wherein said conical alignment guide is stationary and has a sloped surface, facing the direction of movement of said warp yarns.

22. (New) The apparatus of claim 21 wherein said conical alignment guide has a sloped surface of about 30 to 60 degrees.

23. (New) The apparatus of claim 23 wherein said conical alignment guide has a sloped surface of about 45 degrees.

24. (New) The apparatus of any one of claims 19-23 wherein said conical alignment guide is a final guide for guiding a rotating weft yarn on to said warp yarns in substantially perpendicular alignment.

25. (New) The apparatus of claim 24 wherein said source of supply of said weft yarn is a spool or cone of a weft yarn.

26. (New) The apparatus of claim 25 wherein said source of supply of said weft yarn is a plurality of spools of weft yarns that are mounted on said drum in circumferentially spaced relationship.

27. (New) The apparatus of claim 26 whercin said drum comprises a hollow ring which surrounds said support structure, which has said plurality of spools of said weft yarns mounted away from said support structure and which has a radial disk that is spaced away said plurality of spools and that surrounds said conical alignment guide, so that said weft yarns extend from said plurality of spools to said disk and then vertically to said conical alignment guide.

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28. (New) The apparatus of claim 27 wherein said radial disk is downstream from said plurality of spools and said weft yarns extend downstream from said plurality of spools.

29. (New) The apparatus of claim 24 wherein said weft yarns are wrapped about said warp yarns so as to establish 40-140 wraps of said weft yarns per inch along the length of said warp yarns.

30. (New) The apparatus of claim 29 wherein said weft yarns are wrapped about said warp yarns so as to establish 40-100 wraps of said weft yarns per inch along the length of said warp yarns.

31. (New) The apparatus of claim 29 wherein said warp yarns have a density of 40-140 yarns per inch.

32. (New) The apparatus of claim 30 wherein said warp yarns have a density of 40-100 yarns per inch.

33. (New) The apparatus of claim 24 wherein said heater is downstream from said weft yarn delivery system.

34. (New) The apparatus of claim 26 wherein said heater is downstream from said weft yarn delivery system.

35. (New) The apparatus of claim 27 wherein said heater is downstream from said weft yarn delivery system.

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36. (New) The apparatus of claim 24 wherein a driven take-up system is downstream from said weft yarn delivery system and is operatively connected to said warp yarns for moving said warp yarns along said support structure and through said warp yarn delivery system.

37. (New) The apparatus of claim 26 wherein a driven take-up system is downstream from said weft yarn delivery system and is operatively connected to said warp yarns for moving said warp yarns along said support structure and through said warp yarn delivery system.

38. (New) The apparatus of claim 27 wherein a driven take-up system is downstream from said weft yarn delivery system and is operatively connected to said warp yarns for moving said warp yarns along said support structure and through said warp yarn delivery system.

39. (New) The apparatus of claim 24 which further comprises a cooler, downstream of said heater, to set said adhesive that bonds weft and warp yarns, between which is said adhesive.

40. (New) The apparatus of claim 26 which further comprises a cooler, downstream of said heater, to set said adhesive that bonds weft and warp yarns, between which is said adhesive.

41. (New) The apparatus of claim 27 which further comprises a cooler, downstream of said heater, to set said adhesive that bonds weft and warp yarns, between which is said adhesive.

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42. (New) The apparatus of claim 24 wherein said heater adhesively bonds said wrapped weft yarn to said warp yarns to form a cylindrical fabric and wherein said apparatus further comprises, downstream of said heater, means, for cutting said cylindrical fabric into a flat fabric.

43. (New) The apparatus of claim 42 wherein said means for cutting is a rotary cutter.

44. (New) The apparatus of claim 24 wherein said driven system for said endless belt and said power means for rotating said drum are independently operated and at least one is variably driven such that the angle of wrap of said weft yarn relative to said warp yarns is variable.

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